## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Applicant: Benveniste et al.

Filed:

Herewith

For:

HIGH MASS RESOLUTION MAGNET FOR RIBBON BEAM ION IMPLANTERS

## INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120:

| Serial No.:  | <br> |  |
|--------------|------|--|
| Filing Date: | <br> |  |

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

- 2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):
  - (a) \_\_\_\_ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
  - (b) \_\_\_\_ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".
  - Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):
    - (a) X Within 3 months of the filing date or date of entry into the National Stage.
    - (b) \_\_\_\_ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1733 for consideration of this Statement.
    - (c) \_\_\_\_ Before the mailing date of a first Office Action on the merits after a first or second submission under 37 C.F.R. 1.129(a).

| After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.  |
|---|
| (1) The required certification is given below, or   |
| (2) Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or   |
| (3) Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1733  |
| (e) After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.   |
| (1) Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(i)(1), or  |
| (2) Charge the fee set forth in 37 C.F.R. 1.17(i)(1) to Deposit Account No. 50-1733.  |
| 4. Certification (if applicable)  |
| (a) The undersigned hereby certifies that each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.   |
| (b) The undersigned hereby certifies that no item of information contained in this Statement<br>was cited in a communication from a foreign patent office in a counterpart foreign<br>application or, to the undersigned's knowledge after making reasonable inquiry, was known<br>to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of<br>this Statement.                                 |
| 5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1733.  |
| Respectfully Submitted,   |
| ESCHWEILER & ASSOCIATES, LLC  |
| By Thomas G. Eschweiler<br>Reg. No. 36,981  |
| National City Bank Building 629 Euclid Avenue, Suite 1210 Cleveland, Ohio 44114 (216) 502-0600  |
| CERTIFICATION UNDER 37 CFR 1.10   |
| I hereby certify that this paper, and the documents referred to as attached or enclosed, are being deposited with the United States Postal Service on the date set forth below in an envelope as "Express Mail Post Office to Addressee" service under 37 CFR 1.10, with the below indicated mailing label number, addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. |
| Date: June 25, 2003 Christine Gillroy Christine Gillroy   |

Mailing Label Number: EV317554951US

PTO/SB/08A (02-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Use as many sheets as necessary)

Sheet 1 of 2 Attorney Docket Number |

Complete if Known

Application Number |

Filing Date |

First Named Inventor |

Benveniste et al.

Art Unit |

Examiner Name |

O2-IMP-026

| F                     | C:4-                     |  |                             | DOCUMENTS  | D 0.1   |
|-----------------------|--------------------------|--|-----------------------------|--|---|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number  Number-Kind Code <sup>2 (# known)</sup> | Publication Date MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                       |                          | <sup>US-</sup> 5,481,116                                 | 01/02/1996                  | Glavish et al.                                     | Entire Document   |
|                       |                          | <sup>US-</sup> 5,757,018                                 | 05/26/1998                  | Mack et al.  | Entire Document   |
|                       |                          | <sup>US-</sup> 6,160,262                                 | 12/12/2000                  | Aoki et al.  | Entire Document   |
|                       |                          | US-  |                             |  |   |
| <u> </u>              |                          | US-  |                             |  |   |
|                       |                          | US-  |                             |  |   |
| ***********           |                          | US-  |                             |  |   |
|                       |                          | US-  | -                           |  |   |
|                       |                          | US-  |                             |  |   |

| FOREIGN PATENT DOCUMENTS |              |   |                     |  |   |                |
|--------------------------|--------------|---|---------------------|--|---|----------------|
| Examiner Initials*       | Cite<br>No.1 | Foreign Patent Document   | Publication<br>Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages |                |
|                          |              | Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) | MM-DD-YYYY          |  | Or Relevant Figures Appear                        | T <sup>6</sup> |
|                          |              |   |                     |  |   |                |
|                          |              |   |                     |  |   | <u> </u> -     |
|                          |              |   |                     |  |   | <u> </u>       |
|                          |              |   |                     |  |   |                |
| r                        |              |   |                     | ***  |   | <u> </u>       |

|           | <br> |            |  |
|-----------|------|------------|--|
| Examiner  | <br> | Date       |  |
| Signature |      | Considered |  |
| •         |      |            |  |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (02-03)

Approved for use through 04/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Kn wn Substitute for form 1449/PTO **Application Number** Filing Date INFORMATION DISCLOSURE STATEMENT BY APPLICANT **First Named Inventor** Benveniste et al. Art Unit (Use as many sheets as necessary) Examiner Name Attorney Docket Number Sheet 2 02-IMP-026 2

|                       | Low                      | OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS   | _              |
|-----------------------|--------------------------|---|----------------|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                       |                          | "Tuning Permanent Magnets With Adjustable Field Clamps", R. I. SHCERMER, IEEE, PAC, 1987, pgs. 1514-1516.   |                |
|                       |                          | "Large Permanent Magnet Dipole Performance", G.A. NOVIKOV, N.I. PAKHOMOV, V.I. SHVEDUNOV, V.S. SKACHKOV and W.P. TROWER, IEEE, Proceedings of the 2001 Particle Accelerator Conference. Chicago. pgs. 3227-3229.  |                |
|                       |                          | "New Type of Permanent Magnet Beam Line Optics", S.C. GOTTSCHALK, W.D. KIMURA, and D.H. DOWELL, IEEE, Proceedings of the 2001 Particle Accelerator Conference, Chicago, pgs. 3218-3220.   |                |
|                       |                          |   |                |
|                       |                          |   |                |
|                       |                          |   |                |
|                       |                          |   |                |
|                       |                          |   |                |
|                       |                          |   |                |
|                       |                          |   |                |

|           | <br>       |  |
|-----------|------------|--|
| Examiner  | Date       |  |
| Signature | Considered |  |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.